

Amendments to the Specification:

Please replace paragraph [0021] with the following amended paragraph:

[0021] The detected optical signals are communicated by waveguides 20, namely 400/440 micron graded index multimode optical fibers, to a spectral channel separator 22, namely a series of filters in the preferred embodiment. As also shown in Figures 3 and 4, the filters may comprise band-pass filter coatings 22a, 22b, 22c, and 22d on a faceplate 24 of the detector 26. Each detection fiber 20 is coupled directly to the detector 26 without switching, in the preferred embodiment. While it is possible for the separator 22 to switch and/or demultiplex the light from fibers 20 onto lightguides 24 ~~23~~, as illustrated in Figure 1, in the preferred embodiment shown in Figures 3 and 4, the fibers 20 are mounted in a collimating fiber holder or positioner 21 for directing the light from each fiber 20 to the filter 22 and then onto the detector surface 26. The collimating holder has a collimating microlens for coupling the light exiting the core of the fiber 20 onto the detector surface with a small spot size. In the preferred embodiment, there are 50 detector ports 18, with 200 fibers 20. Thus an array of 50 fibers is arranged in each quadrant or zone of the faceplate ~~22~~ 24 at the detector 26. It will be appreciated that spectral separation may also be achieved using an optical spectrometer or a grating device, such as an arrayed waveguide grating or the like, instead of using a filtering medium or coating. Preferably, the injection and detection locations are the same for each wavelength, however, individual positions for lightguides for each wavelengths can be accommodated, e.g. the detector ports could support 200 positions fiber.